a second step of supplying radio frequency energy in said chamber to generate plasma from said hydrogen gas by radio frequency discharge;

a third step of supplying a silicon containing gas into said chamber; and

a fourth step of forming an amorphous film comprising silicon in said chamber by decomposing said silicon containing gas using radio frequency energy therein,

wherein the supply of said hydrogen gas is stopped simultaneously with start of the supply of said silicon containing gas, and the stop of the supply of said hydrogen gas is continued during the formation of said amorphous film comprising silicon.

24. A film forming method comprising:

a first step of forming a silicon oxide film on a substrate by plasma chemical vapor deposition;

a second step of supplying a hydrogen gas into a chamber;

a third step of supplying radio frequency energy in said chamber to generate plasma from said hydrogen gas by radio frequency discharge;

a fourth step of supplying a silicon containing gas into said chamber; and

a fifth step of forming an amorphous film comprising silicon on said silicon oxide film in said chamber by decomposing said silicon containing gas using radio frequency energy therein,

wherein the supply of said hydrogen gas is stopped simultaneously with start of the supply of said silicon containing gas, and the

stop of the supply of said hydrogen gas is continued during the formation of said amorphous film comprising silicon.

25. A film forming method comprising:

a first step of forming an amorphous film comprising silicon in a chamber by decomposing a silicon containing gas using radio frequency energy therein;

a second step of supplying a hydrogen gas into said chamber; and

a third step of supplying radio frequency energy to said hydrogen gas to generate plasma from said hydrogen gas in said chamber by radio frequency discharge,

wherein said silicon containing gas is supplied into said chamber during the formation of said amorphous film comprising silicon before the supply of said hydrogen gas, and the supply of said hydrogen gas is started simultaneously with stopping the supply of said silicon containing gas.

26. A film forming method comprising:

a first step of supplying a discharge gas into a chamber;

a second step of supplying radio frequency energy in said chamber to generate plasma from said discharge gas by radio frequency discharge;

a third step of supplying a silicon containing gas into said chamber; and

a fourth step of forming an amorphous film comprising silicon in said chamber by decomposing said silicon containing gas using radio frequency energy therein,

wherein the supply of said discharge gas is stopped simultaneously with start of the supply of said silicon containing gas, and the stop of the supply of said discharge gas is continued during the formation of said amorphous film comprising silicon, and

wherein said discharge gas does not contribute to film formation by itself.

27. A film forming method comprising:

a first step of forming an amorphous film comprising silicon in a chamber by decomposing a silicon containing gas using radio frequency energy therein;

a second step of supplying a discharge gas into said chamber; and

a third step of supplying radio frequency energy to said discharge gas to generate plasma from said discharge gas in said chamber by radio frequency discharge,

wherein said silicon containing gas is supplied into said chamber during the formation of said amorphous film comprising silicon before the supply of said discharge gas, and the supply of said discharge gas is started simultaneously with stopping the supply of said silicon containing gas, and

wherein said discharge gas does not contribute to film formation by itself.

28. A film forming method for forming a plurality of different films in a multilayer in a multichamber apparatus comprising a plurality of chambers coupled to each other, said method comprising:

a first step of supplying a hydrogen gas into one of said chambers;

a second step of supplying radio frequency energy in said one of said chambers to generate plasma from said hydrogen gas by radio frequency discharge;

a third step of supplying a silicon containing gas into said one of said chambers; and

a fourth step of forming an amorphous film comprising silicon as one of said different films in said one of said chambers by decomposing said silicon containing gas using radio frequency energy therein,

wherein the supply of said hydrogen gas is stopped simultaneously with start of the supply of said silicon containing gas, and the stop of the supply of said hydrogen gas is continued during the formation of said amorphous film comprising silicon.

29. A film forming method for forming a plurality of different films in a multilayer in a multichamber apparatus comprising a plurality of chambers coupled to each other, said method comprising:

a first step of forming an amorphous film comprising silicon as one of said different films in one of said chambers by decomposing a silicon containing gas using radio frequency energy therein;

a second step of supplying a hydrogen gas into said one of said chambers; and

a third step of supplying radio frequency energy to said hydrogen gas to generate plasma from said hydrogen gas in said one of said chambers by radio frequency discharge,

wherein said silicon containing gas is supplied into said chamber during the formation of said amorphous film comprising silicon before the

supply of said hydrogen gas, and the supply of said hydrogen gas is started simultaneously with stopping the supply of said silicon containing gas.

30. A film forming method comprising:

a first step of forming a film comprising carbon in a chamber by decomposing a carbon containing gas using radio frequency energy therein;

a second step of supplying a hydrogen gas into said chamber; and

a third step of supplying radio frequency energy to said hydrogen gas to generate plasma from said hydrogen gas in said chamber by radio frequency discharge,

wherein said carbon containing gas is supplied into said chamber during the formation of said film comprising carbon before the supply of said hydrogen gas, and the supply of said hydrogen gas is started simultaneously with stopping the supply of said silicon containing gas.

31. A method according to claim 23 wherein said amorphous film comprising silicon is crystallized by a laser light, and the crystallized film is used for thin film transistor.

32. A method according to claim 24 wherein said amorphous film comprising silicon is crystallized by a laser light, and the crystallized film is used for thin film transistor.

33. A method according to claim 25 wherein said amorphous film comprising silicon is crystallized by a laser light, and the crystallized film is used for thin film transistor.

34. A method according to claim 26 wherein said amorphous film comprising silicon is crystallized by a laser light, and the crystallized film is used for thin film transistor.

35. A method according to claim 27 wherein said amorphous film comprising silicon is crystallized by a laser light, and the crystallized film is used for thin film transistor.

36. A method according to claim 28 wherein said amorphous film comprising silicon is crystallized by a laser light, and the crystallized film is used for thin film transistor.

37. A method according to claim 29 wherein said amorphous film comprising silicon is crystallized by a laser light, and the crystallized film is used for thin film transistor.

38. A method according to claim 31 wherein said thin film transistor is a top-gate thin film transistor or a bottom-gate thin film transistor.

39. A method according to claim 32 wherein said thin film transistor is a top-gate thin film transistor or a bottom-gate thin film transistor.

40. A method according to claim 33 wherein said thin film transistor is a top-gate thin film transistor or a bottom-gate thin film transistor.

41. A method according to claim 34 wherein said thin film transistor

is a top-gate thin film transistor or a bottom-gate thin film transistor.

42. A method according to claim 35 wherein said thin film transistor is a top-gate thin film transistor or a bottom-gate thin film transistor.

43. A method according to claim 36 wherein said thin film transistor is a top-gate thin film transistor or a bottom-gate thin film transistor.

44. A method according to claim 37 wherein said thin film transistor is a top-gate thin film transistor or a bottom-gate thin film transistor.

45. A method according to claim 23 wherein a period of time from start of said radio frequency discharge of said second step to said start of the supply of said silicon containing gas is 10 seconds.

46. A method according to claim 24 wherein a period of time from start of said radio frequency discharge of said third step to said start of the supply of said silicon containing gas is 10 seconds.

47. A method according to claim 28 wherein a period of time from start of said radio frequency discharge of said second step to said start of the supply of said silicon containing gas is 10 seconds.

48. A method according to claim 23 wherein $10t \geq T$ where t is a largest period of time selected among periods of time which have uneven values for plural times of said method, and where T is a period of time of the